

CALFED PHASE II ALTERNATIVE DESCRIPTIONS  
USFWS Staff Comments  
June 6, 1997

Fish and Wildlife Service staff have completed a limited cursory review of the CALFED Phase II Alternative Descriptions document and have the following comments:

General Comments

Alternative Descriptions. A certain amount of redundancy is in the descriptions which makes telling how they differ from one another difficult. This was less of a problem for alternative 3, although in this case, some of the alternative variations were derived from alternative 2. Alternatives should be rewritten to make comparison among alternatives easier.

Storage descriptions are vague. Please identify sites. If a dam is to be raised, state which one and by how much.

Although the priorities for developing surface water storage are given, the rationale is not. Expand the discussion to include the rationale behind the priorities.

The term "off aqueduct" is confusing and should be defined.

The goals for modifying conveyance should be stated for each alternative. Presumably this is to convey a greater volume of water. Each alternative introductory paragraph should be expanded to explain the issues associated with each alternative, the magnitude or range of magnitudes of additional water should be stated.

The document should include a water needs analysis and provide supply and demand information. Using water needs analysis information, including all in-basin needs (bay-delta water quality/outflows, instream flows, water rights, water allocations, etc.), the targeted available supplies can be identified and an appropriate response to capture flows can then be prepared. Without this information building structures to capture water is difficult to conceptualize. If the goal of CALFED alternatives is to meet the 2020 projected state-wide water need, the document should clearly note the intent.

The common program should add that although the goal is to improve target resource areas, these improvements do not affect species and their habitats equally and in some cases there are adverse affects to aquatic and terrestrial species and habitats that result from the common program. This is important when comparing the effects of the alternatives on various habitats and species since the common program may be an additional adverse effect to these habitats and species.

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The general level of detail in the alternatives discussions will make evaluating the effects on endangered species difficult. Regardless of the alternative under consideration, the presence of and impacts to listed, proposed and candidate species, species of concern and potential, critical, and/or essential habitat need to be determined to the extent possible by CalFed before selection of the preferred alternative. Actions of particular concern include, but are not limited to, the construction of new storage and conveyance facilities, the construction of setback levees, and the flooding of areas to "provide additional habitat". The Service recommends that determinations be based on the most recent available data regarding distribution of species and habitats. Gathering these data should include conducting thorough surveys according to Service-approved survey protocols. In addition, impacts to wetland and riparian vegetation in general need to be analyzed. The Service recommends mitigation in kind for impacts to sensitive species and their habitat as well as for impacts to wetland and upland vegetation be included in the environmental restoration common program.

Where changes in the location of habitat restoration are proposed (e.g. moving habitat restoration from the south Delta to the north and west Delta), it is important to analyze how the alternative sites compare to the former site in terms of overall "value" for restoration of sensitive species. Before a decision to relocate habitat restoration is made, a number of issues ought to be considered. However, fully evaluation will be difficult with the level of detail provided. Questions that need to be addressed in such an analysis include:

- (1) How does species diversity (number of sensitive species) compare among the sites?
- (2) Are all sensitive plant and animal species present at the originally proposed site represented at the new sites? What species are absent at the new sites? Can the lack of those species be compensated for? If so, how?
- (3) In addition to quantifying presence, it is also important to consider how abundances of sensitive species compare among sites. Do the originally proposed sites have large populations of the sensitive species and the new sites small ones?
- (4) Do the originally proposed sites contain populations of any species that may be especially distinct or otherwise "important" to the recovery of that species? For example, where are the populations within the range of the species? (are they central populations?, peripheral populations?), are they large populations?, are they likely to be genetically distinct from other populations of the species?, etc.

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(5) How does habitat diversity vary among the sites? An analysis of habitat diversity might include consideration of the amount, kind and quality of habitat for species of concern.

Where the document states that actions are to "create habitat" or "provide habitat", it is critical to specify what type of habitat(s) is(are) to be created or provided and what species is(are) expected to benefit from the additional habitat. Habitat for one species is not necessarily habitat for other species.

### Specific Comments

Summary of Common Programs 3, Paragraph 4, line 5. Substitute "innumerable" with "complex".

Summary of Common Programs 10, San Joaquin Basin. Although bromide is an issue in the Delta it is not a substance at issue with the Grasslands area discharges as suggested here.

Summary of Common Programs 11, line 1. Insert "excessive" between "specifically" and "selenium".

Summary of Common Programs 12, Efficiency. Dilution actions in WQ program conflict with the water use efficiency program objectives.

### Appendix B - Water Quality Program

Page 1, Mine drainage, Cd, Cu, Zn. This action, although not specifically mentioned, seems to be directed at Iron Mountain Mine (IMM). CalFed agencies at the top level need to decide policy with respect to IMM. CalFed involvement should be carefully considered as current cleanup activities are progressing, improvements have been made and are continuing.

Page 2, mine drainage, mercury. Methods should include identifying activities in watersheds that may promote the methylation of mercury (e.g. pit gravel mining, creating other anaerobic situations including reservoir construction). This may be implied but is not clearly stated as an important method separate from identifying sources.

Page 3, Urban and Industrial Runoff, chlorpyrifos and diazinon. Reference such as (see also agricultural drainage) should be added in action item to provide cross reference to related actions. This would be useful for all parameters that are covered under different sources (i.e. cadmium under mine drainage and urban/industrial).

Page 4, Wastewater and Industrial discharges. Would expansion of boat discharge actions to upstream reservoirs also improve river

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water quality thus ultimately Delta water quality ?

Page 5, Wastewater and Industrial discharges. Selenium dischargers should be included with copper and mercury at Suisun Bay and Carquinez Straits area. Performance measures - Reduction in selenium loadings from industrial dischargers. Indicator of Success - Removal of health advisories, decrease in bird, fish, and mussel selenium levels to levels protective of wildlife.

Page 5, Agricultural Drainage. Should oxygen depletion due to nutrient loading also be included under this source? Also sediment loading due to farming and logging would seem appropriate here.

Page 6, Agricultural Drainage, selenium. Other Indicators of Success can be decrease of selenium concentrations in biota, achieve Basin Plan and EPA objectives for selenium in the San Joaquin River.

Page 6, Agricultural Drainage, salinity in South delta. Storing or using water with the explicit

intent of diluting a pollutant is inconsistent with federal and state laws, and conflict with the water use efficiency program objectives of CalFed, and likely other CalFed underlying principles. Water quality action items which specifically recommend purchasing water with the intent to dilute pollutants were discussed in several water quality team meetings. Although these action items received low priorities from the water quality teams they remain on the list. The ecosystem water quality team was opposed to including the dilution action items and agreed to leave them on the list if they were only considered as possible emergency actions for spill response or uncontrollable discharges. This distinction has not been noted. Proposing such action items on dilution is inappropriate and will certainly attract severe criticism during the PEIS review.

Construction of tide gates or dams in the Old River area also seems to conflict with the CalFed principle of not redirecting significant negative impacts.

Page 9, Water Management - See comments on dilution above (Page 6, Agricultural Drainage, salinity in South delta).

#### Appendix F-Operation Assumptions for Existing Conditions Modeling

The following should be added to Assumptions:

1. Winter Run Biological Opinion. Delta provisions currently in effect, namely the closure of the cross channel gates February 1 - April 30, should be represented.
2. CVPIA. a) If upstream provisions are going to be

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represented, they should be documented as highly preliminary, subject to change, rather than hard and fast guidance given in an official USBR letter. b) If upstream AFRP proposed actions are going to be represented, then it seems logical that Delta AFRP proposed actions be represented. c) Upstream AFRP proposed actions on the Stanislaus is missing and should be added. d) Delta Smelt Biological Opinion provisions are missing altogether and should be added.

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